

HORNBILL

DISCOVER THE LIVING WORLD

OCTOBER–DECEMBER, 2024



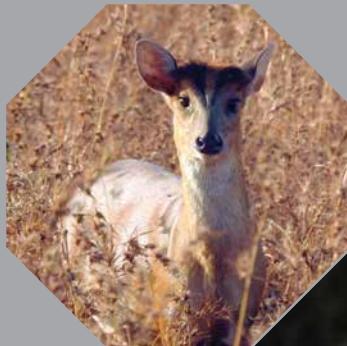
Mount Victoria Babax
– A coveted endemic



BNHS
INDIA CONSERVING NATURE SINCE 1883

BOMBAY NATURAL HISTORY SOCIETY

Online-cum-field Courses for Amateurs – 2025–26



Leadership Course in Biodiversity Conservation (LeadBio)

Duration: 11 months (July 2025 to May 2026)

***Fee:** ₹ 14,556/- (non-BNHS Member)
₹ 13,150/- (BNHS Member)

Basic Course in Herpetology

Duration: 4 months (July 2025 to October 2025)

***Fee:** ₹ 9,556/- (non-BNHS Member)
₹ 8,150/- (BNHS Member)

Basic Course in Botany

Duration: 6 months (July 2025 to December 2025)

***Fee:** ₹ 9,556/- (non-BNHS Member)
₹ 8,150/- (BNHS Member)

Basic Course in Butterfly Studies

Duration: 6 months (August 2025 to January 2026)

***Fee:** ₹ 9,556/- (non-BNHS Member)
₹ 8,150/- (BNHS Member)

Basic Course in Ornithology

Duration: 11 months (August 2025 to June 2026)

***Fee:** ₹ 14,556/- (non-BNHS Member)
₹ 13,150/- (BNHS Member)

Qualification required for all courses: Matriculation
Study Material and Medium of Instruction: English

Write to cec-mumbai@bnhs.org
Mobile: 095949 53425/095949 29107

REGISTRATION STARTS SOON ...

For more information follow us on
instagram [@bnhscec_mumbai](https://www.instagram.com/@bnhscec_mumbai)
(BNHS-CEC, Mumbai)

*Course fee excludes camp fees.



GOVERNING COUNCIL

PRESIDENT

Mr Pravinsingh Pardeshi, IAS (retd.)

VICE PRESIDENTS

Ms Aditi Kothari Desai

Ms Sangita Jindal

Mr Saurabh Singh

HONORARY SECRETARY

Dr Bharat Bhushan

HONORARY TREASURER

Mr Dinesh Kothari

DIRECTOR

Mr Kishor Rithe

MEMBERS

Ms Aishwarya Shridhar

Mr Arvind Mishra

Dr Asad R. Rahmani

Mr Debi Goenka

Dr Jayant S. Wadatkar

Mr Kedar Gore

Mr Kuloyoti Lahkar

Mr Kumaran Sathasivam

Dr Parvish Pandya

Mr Peter Lobo

Mr Praveen Kumar Vashishta

Mr Rohan Bhave-Shah

Mr R. Sreenivasa Murthy

Dr V. Shubhalaxmi

The Secretary,
Ministry of Science and Technology
Dept. of Science and Technology
Government of India,
Technology Bhavan,
New Mehruli Road,
New Delhi 110016

Editors

Kishor Rithe

Vibhuti Dedhia

Consultant Editors

Bharat Bhushan

Gayatri W. Ugra

Isaac Kehimkar

Editorial Assistant

Sonali V. Vadhwakar

Design & Layout

V. Gopi Naidu

Sanchita S. Kadge

Cover: Mount Victoria Babax
by Shalini Gopalakrishnan

Published and printed quarterly
by the Honorary Secretary for the
Bombay Natural History Society,
Printed at Akshata Arts Pvt. Ltd.,
Lower Parel, Mumbai.
Reg. No. RN 35749/79, ISSN 0441-2370.

For more information on the Society
and its activities,
write to the Honorary Secretary,
Bombay Natural History Society,
Dr Salim Ali Chowk, S.B. Singh Road,
Mumbai 400 001, Maharashtra, India.
Tel.: (91-22) 2282 1811
Fax: (91-22) 2283 7615
E-mail: info@bnhs.org
Website: www.bnhs.org

Views expressed by the contributors in
the *Hornbill* are not necessarily those
of the BNHS. Unsolicited articles and
photographs, and materials lost or
damaged are not our responsibility and
no claims will be entertained.

CONTENTS

FEATURES

The Calls of the Valparai Frogs

4



Valparai, a town nestled within
the Anamalai Tiger Reserve,
is a haven of natural beauty.

After spending two monsoons
exploring this plateau,

Preethi S. is well-acquainted
with the region's diverse flora
and fauna. Yet, Valparai continues
to surprise her at every turn.
In this narrative, she shares
fascinating encounters with amphibians
during a monsoon trip to Valparai
– a place she fondly describes
as a paradise for researchers
and wildlife enthusiasts.

Birding in Mizo Hills

10



When **Shalini Gopalakrishnan**
embarked on a birding expedition
to Mizoram, she never imagined
she would encounter two rare
gems of the avian world
the Mount Victoria babax and
the Chin hills wren-babbler.
During her unforgettable journey,
she recorded sightings
of over 100 species and
now plans on returning
to relive those magical moments.

Others

Book Reviews	15
Readers' Space	21
Nature Watch	22
Remembrance	30
Conservation Notes	31

Editorial...

We hope 2025 brings more joyous and eco-friendly moments from the field to share with you. As we wrap up 2024, this final issue highlights special stories from lesser-known regions and little-known species.

Our main feature highlights the Anamalai Tiger Reserve in Tamil Nadu's Coimbatore district, a true paradise for researchers and wildlife enthusiasts. The Western Ghats, home to over 520 herpetofaunal species – nearly 90% of which are endemic – serve as the perfect backdrop. Preethi S., from WCS-India's Western Ghats agroforests team, shares her passion for herpetofauna in this piece. A special thanks to Shashank Dalvi for providing the stunning accompanying images.

This issue will also inspire you to visit Mizoram. A birdwatcher's paradise, Sailam Bird Sanctuary and Phawngpui National Park (known as the Blue Mountains and boasting Mizoram's highest peak) sit near the Myanmar border. Visiting Phawngpui during the Rhododendron bloom is an unparalleled experience. Shalini Gopalakrishnan, the author, vividly recounts her encounter with the park's diverse bird species.

The Eastern Ghats, a lesser-known mountain range in India, are struggling to gain recognition and attention from policymakers. In our Reader's Space section, Trevor Price from the Department of Ecology and Evolution, University of Chicago, shares his memories of Lambasingi (formerly spelled Lammasinghi) near Visakhapatnam. His short narrative discusses the loss of an ancient tree once crucial to the area's identity and possibly a magnet for tourists. Since 2018, Lambasingi has seen a surge in tourism, providing much-needed livelihoods to locals. We hope this growing tourism helps preserve the natural state of the Eastern Ghats rather than accelerating its destruction.

This is the second issue of *Hornbill* under the "Systema naturae 2033" initiative. Inspired by the 1983 ENCYCLOPEDIA OF NATURAL HISTORY, edited by Robert Hawkins and published by the Bombay Natural History Society (BNHS), this project led by Dr Bharat Bhushan, our Honorary Secretary, will culminate in the BNHS 150 Years Omnibus of Natural History. This issue features a BNHS member Savio Fonseca's account of the Sri Lanka Frogmouth, sighted in the Western Ghats' dense forests at Bhagwan Mahaveer National Park, Goa.

In this issue's book review, Rahul Khot introduces THE TREASURES OF NANYUKI, a fiction title by Subrata Mukhopadhyay. The story follows "Gola", a Mowgli-like character, on his adventures through forests in India and Kenya. This thrilling tale is sure to captivate children and young adults alike. I have reviewed the book ENDANGERED PARROTS OF THE WORLD ON STAMPS, COINS, AND BANKNOTES by BNHS life member Mr Sushilkumar Agrawal. This book uniquely combines popular hobbies such as stamp and coin collecting with a



focus on endangered parrots listed on the IUCN Red List and their conservation status. While it appeals to nature enthusiasts and conservationists, it is also a valuable resource to government personnel, including police, customs officers, and enforcement agencies, who work to combat the illegal wildlife trade and smuggling.

Ashok Captain's name is synonymous with herpetofauna. His article, *Naja sagittifera: Cost per Pixel* gives an account of his friend Girish Choure's visit to the Andaman Islands, featuring rare photographs. The Andaman Islands are home to some of the most breath-taking snakes on our planet including endemic ones like the Andaman bronzeback, the Andaman cat snake, the Andaman keelback, the Andaman pit viper, and the most elusive of them all (though not in alphabetical order), the Andaman cobra!

Since 2017, the BNHS Indian Skimmer Programme, led by Parveen Shaikh, has engaged nationwide birders through surveys. BNHS has invested significant conservation efforts and funds to protect the skimmer across major rivers in India, including the Chambal, Mahanadi, and Godavari. Our work has inspired numerous birders to focus on the species. In this issue's Nature Watch, BNHS's senior researcher Khushboo Rani celebrates the return of the Indian skimmer to the Ganga River at Bihar's Vikramshila Gangetic Dolphin Sanctuary (VGDS). Established in 2009, VGDS serves as a refuge for endangered species, including the Gangetic dolphin and now the Indian skimmer, which was not seen in the area since 2011.

In early 2025, I attended a conference at Tadoba-Chandrapur where scientists discussed non-invasive wildlife population management techniques, such as reversible chemical contraception, immuno-contraception, and translocation of animals for managing locally abundant/surplus wildlife populations. They feel that these strategies are crucial for addressing conflicts in landscapes like central India, where tiger (and leopard populations in Sangli, Pune, and Ahmednagar, all sugarcane intensive districts) can sometimes outstrip the ecosystem's capacity. Kedar Gore, a BNHS Governing Council member, shares his thrilling experience at Padmashi Camp in Kanha Tiger Reserve's Kisli Range.

I work diligently to bring you solid Conservation Notes from different parts of India, highlighting the pressing conservation concerns facing various ecosystems. In this issue, I share my recent field trip to Ladakh, where we examined the impact of free-ranging dogs on endangered species and their dwindling habitats.

Finally, do you read the advertisements in *Hornbill*? Don't just flip past them – consider gifting a BNHS membership to a loved one! It is a perfect way to make them a true friend of nature, allowing them to explore the wonders of wildlife.

Enjoy reading this issue!

Kishor Rithe

The calls of the Valparai Frogs

Text: Preethi S.

Photographs: Shashank Dalvi

Illustrations: WCS-India

Nelliampathi Dancing Frog:
Showcasing foot-flagging behaviour



Valparai, a small town cradled within the Anamalai Tiger Reserve in Coimbatore district of Tamil Nadu, is a paradise for researchers and wildlife enthusiasts. After two monsoons of traversing this plateau, I have become intimately familiar with its flora, fauna, and human inhabitants. Yet, Valparai never ceases to surprise me at every turn. Each morning, I am awoken by the soothing sound of rain and the melodious call of the Malabar whistling-thrush – a bird so prevalent here that you almost forget it is considered shy and elusive elsewhere in the Western Ghats. Here, these birds are as common as city crows, adding to the town's unique charm.

But the wildlife spectacle does not end with birds. Troops of lion-tailed macaques, brown mongooses, small Indian civets, and even the occasional leopard or Indian porcupine roam freely. Although dominated by tea, coffee,

and spice plantations, the regional landscape is a mosaic of national parks, primary tropical evergreen forests, and forest fragments, making it a biodiversity hotspot like no other.

Our research station, overlooking the Valparai River and the majestic Akkamalai Sholas, offers a sensory feast every day during the monsoon. Mist dances across the landscape, rivers surge in brilliance, and the scent of freshly cut tea leaves mingles with the crisp, chilly wind. On my first visit to this captivating landscape, my colleagues – Dr Vishnupriya, Raagini, Shivakumar, field assistants Prem and Ajay – and I spent our time exploring different habitats, meeting estate managers, and planning field surveys. A short walk through a tea estate led us to a swamp-filled valley where the rhythmic “chop, chop, chop” of workers cutting tea filled the air. Just around a bend, a herd of grazing gaur introduced me to the remarkable coexistence this place fosters between humans and wildlife.



Yellow-bellied Bush Frog: A species of the high elevations in Anamalai Hills



The Endangered Jayaram's Bush Frog: Perched on a coffee bush



Spinular Night Frog: A declining population trend has led to its classification as Endangered

However, this shared space has its darker sides, particularly in the form of roadkills. During our walks, we often encountered dead frogs and shieldtail snakes, both endemic to the Anamalai Tiger Reserve and the Western Ghats. Drawn to the warmth of the road during the monsoon, these slow-moving, non-venomous snakes emerge from the soil to mate, only to meet a tragic end under the wheels of passing vehicles. As the season wore on, I was disheartened by how many more I saw dead than alive.

But why are we here in Valparai? We are part of the Western Ghats – Agroforests team at the Wildlife Conservation Society-India, and our mission is to study the biodiversity of these mixed landscapes. The Western Ghats, one of the world's eight biodiversity hotspots, is teeming with species, most of which are endemic (*c.* 90%). Habitat loss and forest fragmentation have pushed many species outside Protected Areas, where they face the challenges of sharing space with humans. However, agroforests – plantations of tea, coffee, pepper, and spices – often incorporate forest trees into their farming practices, providing crucial habitats for biodiversity.

The Western Ghats are known to host over 520 species of herpetofauna (herps), with nearly 90% endemism of amphibians to the region. These play a vital role in maintaining ecosystem balance, serving as natural pest control agents and indicators of soil and water health. Our study in Valparai focuses on understanding



Griet's Bush Frog: Resting on a tea leaf

how herpetofaunal populations fare in these modified landscapes, the impact of climate change, and the management of agricultural lands and waterbodies to conserve these species.

We began by examining anuran species across different land-use types, setting up one of the first long-term monitoring of their populations in the Anamalai Hills, with over 400 monitoring points across waterbodies and plantations in Valparai. We record frog calls and count sightings at various times during the monsoon at these points. This data helps us understand how species adapt well to different land uses and microhabitats, of weather conditions that affect their activity, and when breeding peaks occur. By collaborating with plantation owners and stakeholders, we aim to develop sustainable agroforest management strategies that will benefit both the amphibians and the ecosystem.

Fieldwork for a herpetologist usually begins in the evening, but sometimes, nature does not wait. One memorable afternoon, while preparing lunch, we were startled by a brahminy worm snake slithering into our kitchen – a first for us, though sharing space with scorpions and huntsman spiders was already routine. We carefully relocated the snake to our tiny balcony garden, adding another story to our growing collection of wildlife encounters.

At 5:00 p.m. each day, a crucial message from the Nature Conservation Foundation (NCF) team in Valparai alerts residents about elephant movements in the estates – a life-saving initiative that has significantly reduced human-elephant conflict. As our project revolves around night surveys in agroforests, these updates are invaluable, guiding us on the areas to avoid each evening.

Dusk signals the start of our work schedule. After selecting survey routes, we gear up with torches, recorders, datasheets, and other equipment. Then comes the layering ritual: field pants and shirts, rain gear, socks, leech socks, and gumboots. Armed with umbrellas, we pile into our trusty field vehicle and head out, passing tea shops as we enter the estates.

One evening, we noticed a group of people gathered near what seemed like a snake roadkill. Instead, it was a spectacled cobra that had swallowed half of a common Asian toad but slithered away upon noticing the crowd. The toad, half-dead with paralyzed hind legs, was moved into the bushes, leaving nature to take its course.

Valparai's 250 square kilometres of agroforests are largely owned by seven companies, but that night we chose to survey Thalanar, a high-elevation route of smaller, often family-owned



Locals and Researchers: Observing a cobra devouring a toad in the middle of the road



Valparai: A vibrant showcase of the dynamic life in the Anamalai Hills

farms. Thalanar, shrouded in perpetual mist, is a narrow 11-kilometre stretch of coffee agroforests bordered by pristine forests and adorned with waterfalls at every bend in the road. This magical valley, where lichen, mosses, and ferns drip from trees during the monsoon, steals the heart of every visitor.

By 6:00 p.m., we reached our survey points and began measuring canopy cover – a critical step in understanding how it affects amphibian occupancy. Dense canopy creates cooler, wetter microclimates suitable for some species, while others thrive in canopy openings. As we waited for the cicadas to quiet down, we started recording amphibian calls with our omnidirectional microphones.

“Treek; Trrrrrr...tik, tik, tik; treep...treep...treep.” The coffee estates came alive with the chorus of frogs croaking. Each minute of recording revealed a new soundscape as we moved through different points and microhabitats. Let me introduce you to some of these frogs, whose calls are as distinctive as their appearances.

“Treek-tick-tick-tick” is the call of the Wayanad bush frog *Pseudophilautus wynaadensis*, a common species in the Western Ghats. These

frogs, with their comma-shaped markings near the tympanum, can be found in almost every tea bush in Valparai, and their colours range from brownish-red to greenish-brown with sometimes a small X-pattern on their bodies.

“Trrrrrrrrrrrr” rumbles the yellow-bellied bush frog *Raorchestes flaviventris*, a green frog with yellow spots on its back, belly, and thighs. Its cousin, *Raorchestes ponmudi*, calls the same way but is less colourful and more widespread across the Western Ghats. While *R. flaviventris* is restricted to high elevations in the Anamalai Hills, *R. ponmudi* adapts to various habitats at lower elevations.

We also heard the soft, repetitive “Griet...griet ... griet” of the Griet bush frog *Raorchestes griet*, a dull brown-grey frog with golden eyes that prefers higher elevations. Despite its subtlety, its call is distinctive in the chorus.

As I stood still to avoid disturbing the acoustic recording, I spotted a creature slithering past my leg – a caecilian, *Ichthyophis* sp., a limbless amphibian endemic to the Western Ghats. With small eyes and a mouth adapted for eating earthworms, this fossorial species spends most of its life underground.

Further ahead, near a stream, we spotted a bright reddish-brown Nellyampathy dancing frog *Micrixalus nellyampathi* perched on a rock. These frogs, known for their foot-flagging behaviour, perform a dance-like display to attract mates and deter rivals. This genus is unique in being the only diurnal group of frogs in India, inhabiting fast-flowing rocky streams.

We also encountered other frog species in the streams, including *Indirana* (leaping frogs) and *Minervarya* (cricket frogs), meowing night frog *Nyctibatrachus poocha*, and a few common Asian toad *Duttaphrynus melanostictus* in bright yellow breeding colours. Previous studies indicate that stream frogs, which require torrent habitats for breeding, struggle more in modified landscapes, with fewer dancing frogs and night frogs in plantation streams than in forested ones.

After completing the night’s sampling, we returned to the field station for dinner and much-needed rest. But let me not romanticize



Wayanad Bush Frog: One of the most common bush frogs in the Western Ghats



Meowing Night Frog: Known for its mewing call to attract mates

the fieldwork too much – it is not all fun and games. The number of leech bites you endure is often directly proportional to the number of frogs you spot, and Thalayar is rich in both. Wet, stinky clothes are the norm after constant rains, and everything is prone to mildew. Silica gel, hair dryers, and heaters become our best friends as we try to dry our equipment before bed.

Sharing a field station with colleagues and friends makes these challenges bearable, with hearty meals and funny anecdotes at the end of each day. In the following weeks, we continued our surveys, completing over 150 sampling points in Valparai. When we review our recordings, identify frog calls, and analyze the data, we will better understand how different frog species use the varied landscapes in this region.

As we gather invaluable data on these elusive species, the challenges of climate change loom large. Unpredictable monsoon patterns threaten not only Valparai's tea crops but also the amphibians that rely on the region's freshwater ecosystems. Engaging with land managers to

develop resilient agricultural systems that protect both biodiversity and livelihoods has become one of our most important goals.

This season in Valparai, surrounded by plantations, rolling sholas, streams, and rivers, has truly opened my eyes to the dynamic life in the Anamalai Hills. The lush tea and coffee plantations mask a hidden world teeming with life, where every bush hides a story. I feel privileged to have had the opportunity to experience and understand this remarkable place, and I eagerly anticipate the next steps in our journey to protect and preserve this unique ecosystem. 



Preethi works at WCS-India with the Western Ghats agroforests team. Fascinated by reptiles since her childhood, her major interest is working with different kinds of herpetofauna and contributing to their conservation in the Western Ghats.

Birding in Mizo Hills

Text and Photographs:
Shalini Gopalakrishnan

The Hornbill, both the bird and our very own BNHS magazine, has always been a source of inspiration.

A few years ago, an article in *Hornbill* by Dr Raju Kasambe, transported me to the lush green forests of Mizoram and its extraordinary birdlife. With the concluding words of the article, the seeds of birding in Mizoram were firmly planted in my mind and heart.

And so, this dream to bird in the surreal forests of Mizoram, fueled by a quest to see one of the rare birds sighted in India, led me and my friends to the base of Phawngpui National Park also known as the Blue Mountains, due to the serene blue hues it adorns during winter. Somewhere in these mountains was a bird of legend – the Mount Victoria babax – unseen for decades and found only in the Phawngpui National Park in India. This Park harbours the highest peak in Mizoram and extends to Myanmar across the international border.

Our vehicle dropped us at a designated point and proceeded to deposit our luggage at the Far Pak rest house. Within some minutes of our hike, we heard the bird. The bird was calling from somewhere down the cliff. Guided to the edge of a sheer cliff – where only three people could stand at once – we strained to spot it. I could not see the bird from where I was positioned but the sense of anticipation was palpable. The Mount Victoria babax had remained elusive for 25 years and its first photographic record was in 1997, post that it was spotted again in 2022. Such was the myth and hype around seeing it, that we considered it lucky to have seen it right at the start of our visit to these mountains. As two of us could not see the bird, we decided to scan the

Mount Victoria Babax



area again the next day. Every sunrise ushers in fresh possibilities. With renewed determination, we resumed our quest for the elusive bird. Hearing its call near our camp, we quickly rushed toward the source. After some effort, we finally managed to track the bird. Once again, we found ourselves perched precariously on the edge of a cliff, balancing both ourselves and our cameras, straining to catch a glimpse of this beauty hidden behind bamboo shoots and tall grass. And that is how I first saw the Mount Victoria babax – a true rarity in the birding world!

One of us had missed this hike and wanted to see the bird. I took it upon myself to show her the miracle that we had just witnessed and so, me and my friend hiked back to the spot. But the bird was nowhere to be seen. We could still hear it very close to us. Such is the camouflage that nature provides that although the bird was just three feet away from us, we could not locate it. Finally, we got a glimpse of the bird through the leaves. The bird saw us too. We froze; stood like statues. It did not sense any danger or disturbance from us and continued its melody. And, from a faraway cliff there was an answer to its call. We were mesmerized! It was a dream come true for us, parked on the highest mountains that lay deep south of one of the easternmost and inaccessible parts of our country, looking at the amazing vista of cliffs and rocks interspersed with bright red rhododendron flowers sprawling before us and this tiny rarity unperturbed by our presence continuing its duet. Moments like these jolt us, rejuvenate us and make life worth it! It was an experience of a life time for me.

Another memorable sighting etched in my memory is that of the Chin Hills wren babbler. Spotting a wren babbler, let alone photographing one, is a challenge of an entirely different magnitude. Camouflaged and armed with our cameras, we crouched and waited at our chosen spot. After what felt like an eternity, there was a sudden dash of brown, accompanied by the rustling of leaves and bustling movements on the litter level. As we strained to locate the source of the sound in the dense foliage, a tiny ball of



Rufous-fronted Babbler



Assam Laughingthrush



Chin Hills Wren-babbler



Hume's Treecreeper



Grey Bushchat



Ashy Wood-pigeon

feathers suddenly emerged in a small clearing between dried twigs and leaves. Spellbound, we watched the elusive skulker as it produced a melodious note before vanishing into the thick brown undergrowth within seconds. This marked my first sighting of any wren babbler in India. Nearby, on the moss-laden bark of a massive tree, we also spotted the Hume's treecreeper, creeping and foraging. Both these birds are rarities, found only in select pockets of Mizoram. These encounters filled us with a sense of triumph and deepened our appreciation for Mizoram's rich biodiversity.

During our birding trails atop the blue mountains, we realized why the region is a magnet for birds and a sanctuary for some rare species. The vegetation was a mesmerizing mix – dense and sparse, tall and short, painted in hues of red, yellow, green, and brown. Surrounding the Far Pak rest house were pine trees, rhododendrons, and other flora. Some sections featured open meadows and tall grasses. The landscape before us was nothing short of magnificent, like an artist's tapestry. The topography was reminiscent of our country's own diversity, offering a variety of habitats that welcomed an incredible array of birdlife, a splendid unity in its extraordinary diversity.

The blooming rhododendrons attracted a variety of birds: Assam laughingthrushes, striped laughingthrushes, brown-headed scimitar-babblers, little buntings, olive-backed pipits, grey bushchats, grey sibias, buff-barred warblers, greenish warblers, ashy wood pigeons, green-tailed and fire-tailed sunbirds, and many others. Amidst this breathtaking setting, we chanced upon two yellow-throated martens hanging upside down, on rhododendron trees, nibbling. The moment they noticed us, they doubled their speed and disappeared from sight. High on a pine tree, we spotted a striped-breasted woodpecker. In the early morning, a group of mountain bamboo partridges greeted us as we sipped tea and ate bread. Next, we embarked on a short forest trail where we encountered rufous-winged fulvettas, chestnut-headed tesias, and



Striped Laughingthrush



Olive-backed Pipit

grey-hooded warblers. The forest was alive with bird calls, many of which we could not identify. An evening walk through the grasslands revealed a pair of streak-breasted scimitar-babblers and the lovely spot-breasted parrotbill, singing loudly from a bamboo stalk. We also saw the golden babbler, blue-winged minla and black-throated tit.

Sailam Bird Sanctuary is another wonderful place to see birds in Mizoram. We arrived at the Sanctuary late in the evening, under the cover of total darkness. As dawn broke, we stepped out of our modest lodge and found ourselves in a birdwatcher's paradise. The cacophony of life had already begun, with birds of various sizes, colours, and songs flitting about, busy with their daily routines. Awestruck, we quickly set off on our birding trail.

We were fortunate to glimpse the elusive spot-breasted laughingthrush and to my delight, a white-browed piculet, a bird which had eluded me for years, perched on a bamboo shoot. We captured a few photographs before moving on. Our luck continued with sightings of grey sibias, flavescents bulbul, long-tailed minivets, flowerpeckers, warblers, and a red liocichla that darted past. Gregarious lesser necklaced



Spot-breasted Parrotbill



Mountain Bamboo Partridge

laughingthrushes flew across, as we strolled along the road. We were thrilled to hear the blue-naped pitta, though it remained hidden from view, as did the pygmy cupwing and grey-bellied tlesia. A brief glimpse of the Himalayan shortwing was all we managed before it disappeared into the dense shrubbery. Flocks of white-throated bulbul and ashy bulbul flew past, and the elusive spotted elachura tested our patience, calling from close by but only showing itself for a fleeting moment. Such are the challenges of birding in the dense, pristine forests of the Northeast.

Exploring new trails within the Sanctuary, we spotted Nepal fulvettas, lesser yellow-napes, maroon orioles, blue-throated barbets, Blyth's leaf warblers, streaked spiderhunters and a host of others including a pair of spot-breasted scimitar-babblers. During a lunch break by the Tuipui-D River, a rufous-fronted babbler surprised us with its melodious call. After a patient search, we spotted it hidden in nearby shrubbery.

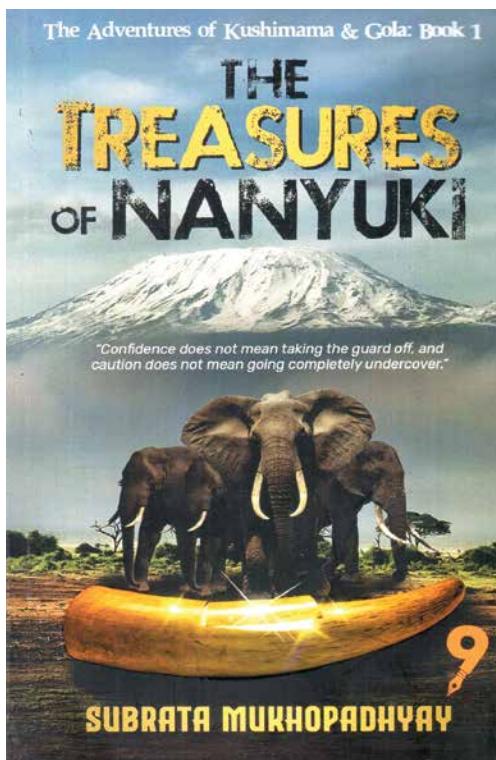
Finally, the day of departure arrived. We left Sailam for the Lengpui Tourist Lodge, just fifteen minutes from the airport. With two hours to spare before our flight, we decided to take a final walk around the lodge. Our simple walk around the lodge yielded the sighting of a Siberian

rubythroat, winter visitor to India, perched on a tall grass strand and singing melodiously. Asian barred owlet, Taiga flycatcher, white-rumped shama, white-throated munia, pale-billed flowerpecker, and little spiderhunter were some others that we spotted as we concluded our trip. Our birding expedition had been an incredible success. In all, we recorded 135 species – each sighting, a brushstroke on the canvas of our unforgettable journey.

And as it is said for the mountains, it may be said for the forests too, ‘Once you dwell in them, you will always long to go back to them and they live within you forever’. 



Shalini Gopalakrishnan is an IT Professional; a wildlife enthusiast and photographer by passion, documenting the natural world through words and pictures; to create awareness and inspire love for our unique biodiversity.



The Treasures of Nanyuki

By: Subrata Mukhopadhyay

Published by: Subrata Mukhopadhyay

Size: 20.5 x 13 cm

Pages: 240

Price: ₹ 299/-

Paperback

Reviewed by: **Rahul Khot**

If you are someone who loves wildlife and adventure, Subrata Mukhopadhyay offers you a captivating read with his debut book, **THE TREASURES OF NANYUKI**. This fiction novel targets young adult readers and promises an exciting journey.

The story follows a teenager named Aniruddha Chatterjee, nicknamed “Gola”, from Nagpur. Gola has just completed his eighth-grade exams and is enjoying his summer vacation. His maternal uncle, Kaushik Ganguly, known as “Kushimama,” is a RAW officer stationed in Delhi.

One hot summer afternoon, Gola receives a call from his beloved Kushimama inviting him to Delhi and asking him to bring his passport. Gola’s mother is assured of a planned trip across Assam, West Bengal, and Uttarakhand.

Gola flies alone to Delhi, where Kushimama welcomes him warmly. After two days, they travel to Kaziranga, Assam, where they meet Mr Himanshu Saikia, the park’s Public Relations Officer. While Kushimama meets Mr Gupta, the Conservator of Forests, Gola explores the park, unaware that this journey is only the beginning.

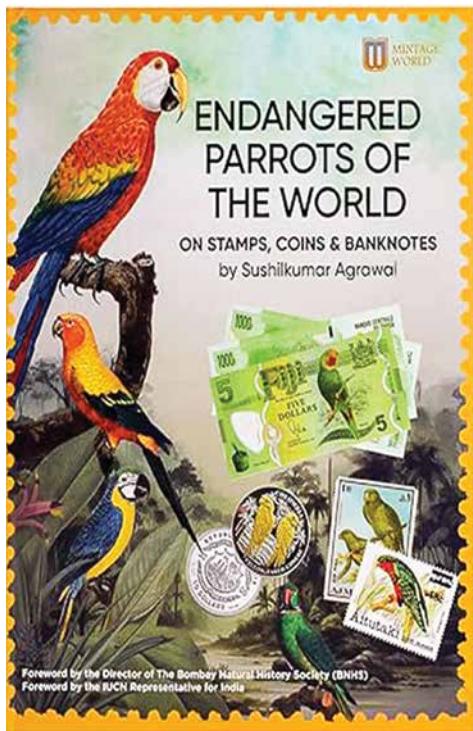
Back in Delhi, Kushimama finally reveals that they are heading to Mumbai and then Kenya. What begins as an ordinary trip turns into a dangerous mission to expose a global wildlife trafficking network. In Nairobi, Gola is kidnapped but manages to escape. As danger escalates, Gola’s quick thinking saves Kushimama and others more than once.

Their adventure leads them deep into Kenya’s breath-taking yet perilous landscapes, where they unravel secrets, face unexpected twists, and ultimately bring down the mastermind behind the illegal trade. Packed with action, intrigue, and real-world conservation issues, this thrilling journey takes readers through India and Kenya’s wild heartlands.

The book is well-structured, consisting of fifteen engaging chapters. It offers fascinating facts and vivid descriptions of various places, sometimes resembling an encyclopedia with its detailed information. The tone is well-set, making it hard for readers to put the book down. The binding is good, and the book’s concise size adds to its appeal. I noticed one minor editorial error on page 69, which could have been avoided.

Considering this is Subrata Mukhopadhyay’s first book, his efforts are commendable. The target audience, particularly children and young adults, will surely enjoy this thrilling adventure. I especially appreciated the acknowledgment section, where Subrata recounts an insightful conversation with a colleague stationed in Nairobi. When deciding between Singapore and Kenya for his next holiday, Subrata’s colleague, Luc Van Dooren, advised him to visit Kenya, saying, “Even if you visit Singapore twenty years from now, you will see more than what you can see today. But the Kenyan forests and wildlife may disappear by then.”

This statement reflects a sobering reality: natural habitats and biodiversity are diminishing at an alarming rate worldwide. Books like this can play a small but meaningful role in wildlife conservation awareness. We eagerly await Gola’s next adventure and look forward to reading it soon. ☺



Endangered Parrots of the World on Stamps, Coins, and Banknotes

By: Sushilkumar Agrawal

Published by: Self published, 2024

Size: 29 x 22 cm

Pages: xiv + 177

Price: ₹ 999/-

Hardback

Reviewed by: **Kishor Rithe**

This book combines popular hobbies like stamp and coin collecting with a focus on endangered parrots listed under the IUCN Red List and their conservation status. Embark on a kaleidoscopic journey where the world of endangered parrots comes alive through stamps, coins, and banknotes.

ENDANGERED PARROTS OF THE WORLD ON STAMPS, COINS, AND BANKNOTES is a vibrant book written by BNHS life member Mr Sushilkumar Agrawal, who is passionate about wildlife conservation and committed to raising awareness through media and popular hobbies. As the owner of the renowned media enterprise Ultra, a household name, Mr Agrawal brings his expertise to this unique endeavour.

The book takes an exceptional approach to promoting awareness about threatened parrots, drawing inspiration from the International Union for Conservation of Nature's (IUCN) Red List. It showcases endangered parrot species as depicted on stamps, coins, and banknotes from around the world. Each page is carefully curated to delight collectors and conservationists alike while carrying an urgent call to action for the preservation of these remarkable birds.

Richly illustrated with colourful photographs of stamps, coins, banknotes, and parrot artwork, the book is both visually engaging and educational. It highlights how many parrot species are threatened by illegal hunting, trapping for trade, deforestation, and climate change.

Beyond nature enthusiasts and conservationists, this book will also be valuable to government personnel, such as police, customs officers, and enforcement agencies, who work to combat the illegal wildlife trade and smuggling.

Popular hobbies like stamp and coin collecting are powerful tools for educating young minds. With the advent of social media and the internet, these hobbies have become effective mediums for spreading awareness about endangered wildlife and dwindling natural resources. ☺

We are grateful to

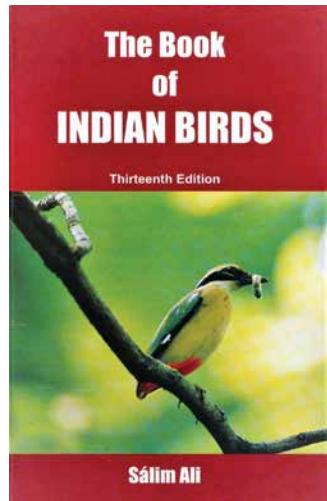
SETH PURSHOTAMDAS THAKURDAS & DIVALIBA CHARITABLE TRUST

for a generous donation to the

Pratap Saraiya Hornbill Fund
to support the publication of *Hornbill*

Call to Contribute: BNHS 150 Years

“The Book of Indian Birds” – *Systema naturae*

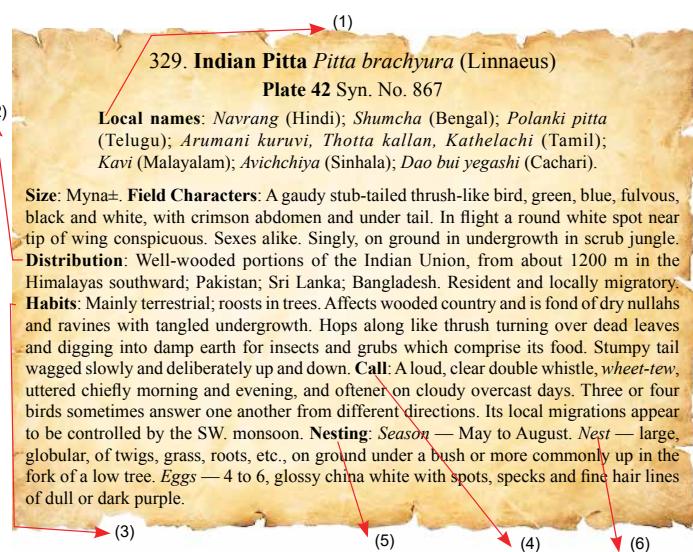


For decades and the better part of the 20th Century, THE BOOK OF INDIAN BIRDS by Sálim Ali, published by the Bombay Natural History Society has been the primary field guide for bird enthusiasts across the Indian Subcontinent. The days of exploring the initial pages with perfect keys to bird identification in the book were the most fulfilling, as one was finally able to ID the yellow-eyed babbler or grey-headed bulbul, for the very first time. The 11th edition in 1979 had revised and enlarged THE BOOK OF INDIAN BIRDS and covered 296 species. The 13th revised edition, had included the extensive changes in the nomenclature since the previous revision in 1996.

Later, the Sálim Ali Birth Centenary Edition was published with 538 species, with the descriptions compiled from his writings, and maintained the same style and format. The illustrations for the additional species were prepared by Carl D'Silva, except for one plate on the mynas that was prepared by Dr Sálim Ali's favourite bird illustrator, J.P. Irani. The latest reprint of the book has been as recent as May 2024 which speaks for the popularity of the book despite the availability of several excellently prepared and presented field guides to the birds of the Indian Subcontinent.

It is essential that any new edition of THE BOOK OF INDIAN BIRDS includes contributions from the vibrant and diverse community of field enthusiasts and researchers, and allow our BNHS members to contribute to the revision of the text of Dr Sálim Ali's timeless classic.

To facilitate this, an example of a species description, drawn from THE BOOK OF INDIAN BIRDS, is included in this page. This extract illustrates the sections and text where BNHS members can contribute by submitting revisions, additional notes, new information and photographs. The information provided will be received by a panel of Editors who will validate the text, and approve the submissions for inclusion. All new contributions will be acknowledged, and the BNHS member will be identified and the participation acknowledged in the revised edition. BNHS members are encouraged to contribute submissions for the 538 species that are listed in the Sálim Ali Birth Centenary Edition at systema150@bnhs.org. To make it easier, the species included in the last edition of the Book, will be the checklist for contributions to be received. BNHS members are also invited to suggest the inclusion of new species based on conservation status, distribution, endemic and endangered status and variance in local abundance. The panel of Editors will evaluate such recommendations and may choose to feature a species' description with a photograph, since it may not justify a new colour plate with multiple species.



BNHS members are requested to contribute to (1) **Local Names** – if any new ones are known, validated by regional use; (2) **Distribution Notes** – if specific local or regional resident status has changed, and if local migration records lend to justify the submission; (3) **Habits** – if there are new records, especially about roosting and nesting habitat or niche, feeding or flock behaviour, and prey or predator strategies among similar aspects; (4) **Call** – if specific record indicates a variation to the earlier record; (5) **Nesting** – changes in seasons, local variations, nest building, and choice of nesting location; (6) **Nidification** – the colour and number of eggs in the clutch. Please note - Nesting and Nidification notes will only be accepted with adequate assurance that the birder has ensured proper care in approach to the nest or only used appropriate long-range technology. We invite our members to contribute to this ambitious new project - as a collection of submissions that will lead to the revised 150-year *Systema naturae* edition of Dr Sálim Ali's THE BOOK OF INDIAN BIRDS.

– Dr Bharat Bhushan,
Hon. Secretary, BNHS

Master of Disguise: The Sri Lanka Frogmouth



Text and Photographs: **Savio Fonseca**

Savio Fonseca is an author, photographer, naturalist, data contributor, and conservationist.



I was bird-watching with a Portuguese couple through the Bhagwan Mahaveer National Park in Goa a part of the dense Western Ghats forest one bright afternoon. Our local guide led us along a path occasionally blocked by fallen trees or low-hanging branches, requiring us to stoop to pass through. Eventually, we reached a dense patch of undergrowth, where the guide pointed out a pair of birds and exclaimed, "There they are!"

The Portuguese couple peered into the undergrowth, puzzled and unable to see the birds. We tried using hand gestures to indicate their location, but it was futile. Speaking was not an option, as we feared disturbing the roosting birds, though it was evident that words would not have been helpful in this situation anyway.

Finally, the man set up his camera on a tripod, and I offered to focus the lens on the birds. Only then did he and his wife grasp the extent of the birds' camouflage. They were visibly astonished and bewildered, struggling to spot the birds with their eyes outside the camera's viewfinder.

The Sri Lanka Frogmouth *Batrachostomus moniliger*, a bird even expert birdwatchers find challenging to detect, had taken them by surprise. Despite their extensive experience identifying bird species worldwide, the couple was amazed at how seamlessly this bird blends into its surroundings. In my opinion, the Sri Lanka Frogmouth is one of nature's masters of disguise, mimicking leaves, bark, and even lichens with remarkable precision.

This bird's camouflage is even more impressive. In a light breeze, it subtly sways to mimic leaves trembling in the wind. Its nest, constructed on a short hollow stump, perfectly blends within the environment making it almost invisible. This exceptional adaptation makes it difficult for experienced birdwatchers, let alone casual observers who may only recognize a few bird species.

A nocturnal bird about the size of a myna, the Sri Lanka Frogmouth inhabits dense evergreen forests at elevations

ranging from sea level to 1,200 m in India and up to 1,800 m in Sri Lanka. While it prefers undisturbed forests, it can adapt to secondary forests and small wooded areas near human settlements.

During the day, it roosts on branches in shady spots, typically 2–6 m above the ground, hidden among the foliage. Sri Lanka Frogmouth hunt for insects in the night, capturing them mid-air, picking them off the ground, or gleaning them from tree surfaces. Their distinctive calls – loud, screeching cries interspersed with chuckling notes – are most often heard at dusk and dawn. Once thought to be rare and restricted to a small range, recent observations have revealed a much wider distribution. However, their incredible camouflage makes it difficult to accurately assess population sizes and trends.

Male and female Sri Lanka Frogmouths exhibit noticeable differences in plumage. Males are predominantly greyish-brown, while females have a greyish-rufous coloration. Both have large heads, wide bills with hooked tips, and bristles around the eyes and bill – typical characteristics of frogmouths. Compared to other members of their family, their wings are shorter and more rounded.

Their markings are intricate and functional. The belly and sides display white spots, and the throat is adorned with white dots resembling an unfinished collar, which mimic lichen patterns on bark. Males exhibit prominent black patches on the head, vermiculated patterns on the belly, and grey bands on the tail and flight feathers, while females have a more uniform rufous tone with fewer black markings and less pronounced barring.

Sri Lanka Frogmouths are commonly found in undisturbed forests with secondary vegetation, often comprising deciduous species such as *Schleichera trijuga*, *Lagerstroemia microcarpa*, *Terminalia bellerica*, and *Terminalia tomentosa*. Specific habitats, such as bamboo forests with *Solanum* and *Strobilanthes* undergrowth, have been identified as particularly suitable. Other habitats include evergreen forests with trees like *Carallia*, *Polyalthia*, *Mesua*, *Myristica*, *Alseodaphne*, and *Garcinia*.

Despite having documented 33 sightings of this bird across Maharashtra, Goa, Karnataka, and Kerala, it remains one of the most elusive species to spot using traditional birding techniques. Professional guides



often rely on recorded calls to attract the birds and then locate them using minimal light.

On one occasion, I flushed out a Sri Lanka Frogmouth during a daytime birding trip in Netravali Wildlife Sanctuary while searching for a Grey-headed Bulbul. Such encounters are rare. The typical approach for finding these birds involves night-time expeditions with recorded calls, though this can pose risks, especially in habitats where venomous reptiles like Russell's Vipers, Hump-nosed Pit Vipers, Malabar Pit Vipers, Spectacled Cobras, and King Cobras are present.

Professional guides employ specialized techniques to locate these birds at night while minimizing disturbance to both the birds and their environment. By using minimal lighting and careful observation, they balance the isolation and conservation needs of this extraordinary species. ■





GIVE THE GIFT OF MEMBERSHIP!

Share your passion for natural history

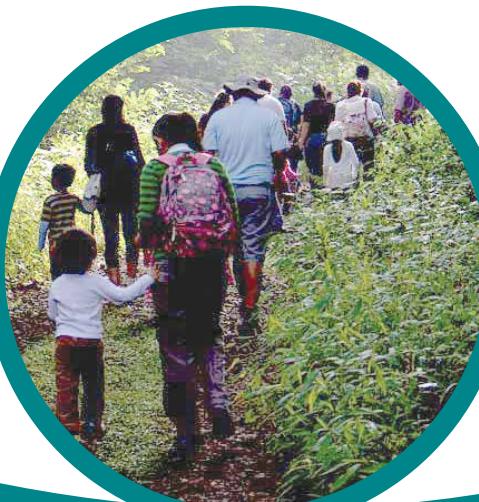
with family and friends.

Explore the woods together!

Your gift of a BNHS will help us continue our important work to conserve our natural environment through research and education.

TYPES OF MEMBERSHIP

- Annual Membership
- Three-year Membership
- Five-year Membership
- Life Membership
- Student Membership
(below 25 years; College ID Proof compulsory)



BOMBAY NATURAL HISTORY SOCIETY

Hornbill House, Dr Sálim Ali Chowk, S.B. Singh Road, Mumbai 400 001, Maharashtra, India.
for further details: Voice call/WhatsApp +91 91372 73106 (Mon–Fri: 9:30 a.m. to 5:30 p.m.).

membership@bnhs.org

www.bnhs.org

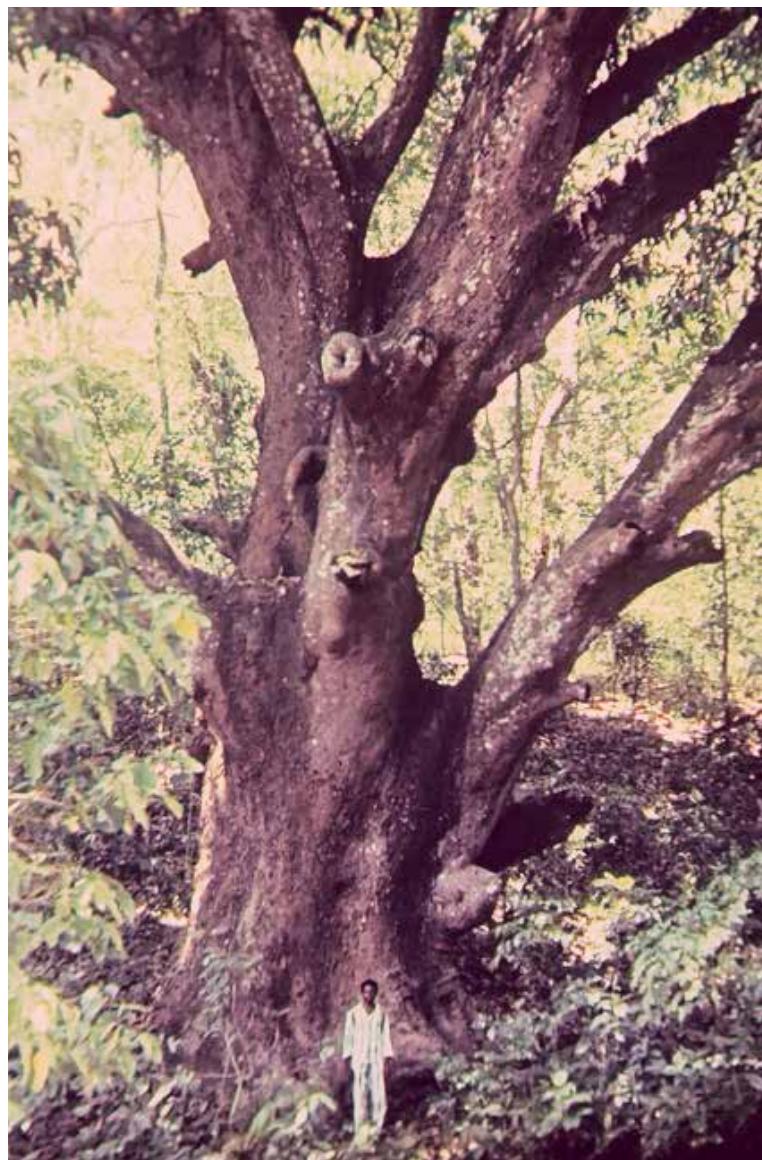
Lambasingi: The king is gone but not forgotten

Lambasingi (formerly spelled Lammasinghi) is a small village perched on the edge of the Eastern Ghats ($\approx 1,000$ m), about 90 km west of Visakhapatnam. Since 2018, Lambasingi has experienced a remarkable influx of tourists. Visitors are drawn partly by the climate, the misty mornings, and natural attractions like its waterfalls. Alongside this surge in tourism, development is proceeding at a rapid pace. Unfortunately, one casualty of development has been a potential tourist gem (pictured).

In 1977, I walked with my local assistant along the track from Lambasingi to Busikota, a 11 km journey eastward. I reported the experience in one of the earlier issues of *Hornbill* (September 1977, pages 11–13), which included a black-and-white rendition of the illustrated picture). Back then, the area was experiencing timber and bamboo extraction. We passed into a zone where the forest department had planted young teak saplings after granting contractors permits to build a track and harvest timber. Amidst this open landscape stood the largest tree I had ever seen – a majestic mango tree, untouched by the surrounding changes. When I returned in 1998, the teak plantation had failed, and 20 years of secondary growth surrounded the tree.

In February 2024, I visited the site again with Naman Goyal and Raja Bandi from the Indian Institute of Science Education and Research (IISER), Tirupati. Sadly, the tree was gone. Sometime in the early 2000s, fire had been used to clear the land for cultivation, weakening the tree. A footpath had once passed right by it, providing shade where people could rest or enjoy its mangoes. However, when constructing the new road, the simplest approach was to pave over the path – and the tree itself. Not even a stump remains. One can only imagine the appeal this tree would have held as a tourist attraction, undoubtedly generating significant revenue for the local community.

This story brings to mind a quote from one of the world's great naturalists, E.O. Wilson. In his book *THE FUTURE OF LIFE* (2001, p. 189), he wrote, "The central problem of the new century ... is how to raise the poor to a decent standard of living worldwide while preserving as much of the rest of life as possible." This idea has been a guiding principle in my conservation efforts. As India's population becomes wealthier and more stable over the next few decades, the nation could see significant benefits from preserving its biodiversity and natural landscapes. This preservation



would enhance quality of life, improve health, and provide economic opportunities.

Tourism is a prime example of how economic growth and nature conservation can go hand-in-hand. Many of India's national parks already generate more local revenue than alternative land uses. For the sake of future generations, it is crucial to preserve parts of the Eastern Ghats in their natural state. The story of the mango tree serves as a reminder: conservation efforts today can protect invaluable natural treasures for tomorrow.

— Trevor Price

Department of Ecology and Evolution, University of Chicago, USA

Naja sagittifera: Cost per Pixel



The Andaman Islands are home to some of the most breathtaking snakes on the planet. The fact that many of them are found nowhere else in the world makes them doubly special.

Text: Ashok Captain | Photographs: Girish Choure
Cast of characters: *Naja sagittifera*, Girish Choure, Nariman

Among these unique species (in alphabetical order) are: the Andaman Bronzeback, the Andaman Cat Snake, the Andaman Keelback, the Andaman Pit Viper, and the most elusive of them all (not in alphabetical order) is the Andaman Cobra!

I forgot how I first met Girish (hereinafter G). It was most certainly not on social media! Though G is an architect, he spends more of his time and money photographing India's diverse snake species than drafting blueprints.

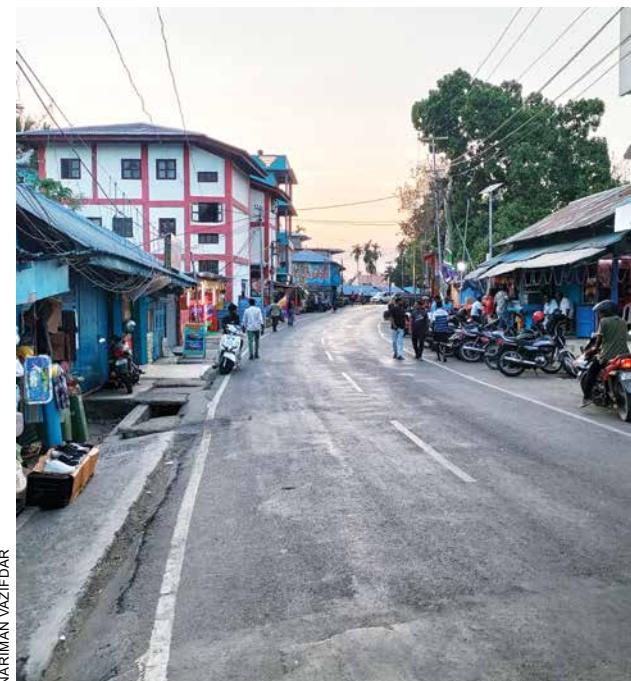
For the past 15 years, G has been photo-documenting snakes, and has even invented his own flash diffuser that produces a wonderfully soft light. For the last eight years, he has been in pursuit of one particularly elusive species: the Andaman Cobra. He had even engineered his honeymoon to the Andaman Islands, secretly hoping to photograph the Andaman Cobra. His wife, to this day, remains blissfully unaware!

Over the years, he has managed to photograph bronzebacks, cat snakes, keelbacks, and even king cobras, but not the Andaman Cobra.

Last February, G answered a call from a 'turtle-friendly' associate, Nariman (N), who asked when he was planning to return to the Andamans. "Soon, sometime next week," G replied. The voice on the other end urged him to postpone his trip, as the weather was good for 'herping' (not a communicable disease, but a colloquial term for searching for reptiles and amphibians), and the snakes were out.

Excitement surged as G rebooked his flight. His excitement skyrocketed (hoping to find his dream species), even as his bank balance plummeted. His excitement was inversely proportional to his bank balance.

Finally, G's luck turned. To cut a long story short, N often assists the local administration in removing unwelcome reptilian guests from



Unnatural habitat of Andaman Cobra –
market at Swaraj Dweep from where it was rescued

NARIMAN VAZIFDAR



Natural habitat of Andaman Cobra

NARIMAN VAZIFDAR

*Naja sagittifera*

human habitations. He had just rescued an Andaman Cobra from near the market at Swaraj Dweep (formerly Havelock Island) and was planning to release it the same day G arrived.

G's hopes were sky-high, his adrenaline levels even higher. His mind raced with 'what ifs.' What if it wasn't the right snake? (Unlikely, as N knows his snakes). What if it wasn't a photogenic individual? Yup, it's not just a human thing. Some snakes look better in photographs than others! Worst of all, what if it looked great but refused to pose? (Again, not just a human issue).

At last, a tormented G met N and his possibly reluctant model. The snake was stunning. They selected an appropriate location – one where, if the cobra decided to make a slithery getaway, it absolutely must not endanger life – neither a human, nor the snake.

Unlike many fairy tales, this one has a happy ending. The model behaved – posed without biting anyone – and G got his killer shots (or so I think, feel free to disagree)!

On the flight home, G wrestled with emotions and exhaustion. Now that he had good shots of a '*sagittifera*', what next?

A bit of mental arithmetic: *Cost of two killer images* (24 megapixels each) = Approximate loss of income per day x days spent in search of *Naja sagittifera* – undisclosed!

Cost of airfare to Port Blair from Pune and back (average for eight round trips), plus honeymoon expenses – ₹ 500,000

Cost of the most recent herping escapade – ₹ 40,000.

Now, add all the above. Divide the total number of pixels by the total spent to get the cost per pixel. As that's beyond my mathematical (in)abilities, let's just agree that these images are, quite literally, priceless-sss! ↘



Ashok Captain is an ophidian taxonomist who is either in the hill forests of Arunachal Pradesh or the specimen rooms at the Bombay Natural History Society. He is particularly fond of the monsoons, umbrellas and leeches.

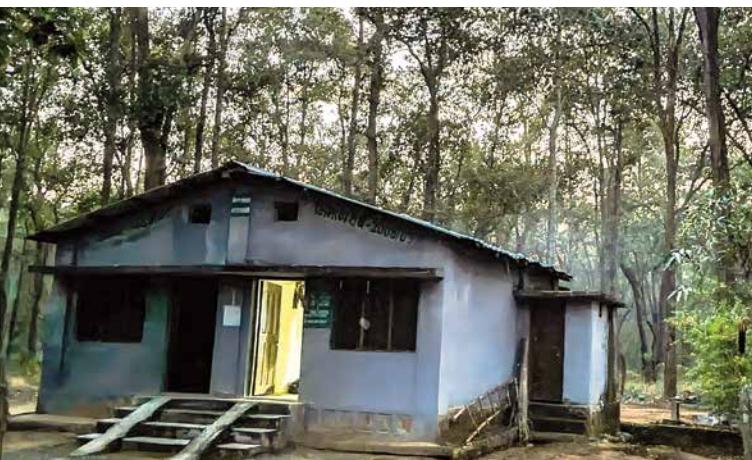


A forest guard patrolling the forest in Kanha Tiger Reserve

The thrill of the unseen tiger

Text & Photographs: **Kedar Gore**

It was January 2022, and I found myself in Kanha, taking part in the All India Tiger (AITE) Estimation. The winter chill in Kanha was at its peak. I was escorted to Padmashi Camp in the Kisli Range in a rugged 4x4 vehicle. The camp, nestled among towering Sal trees, sat atop a small hillock overlooking the Banjar River – the lifeline of Kanha. As I stepped out of the vehicle, I was greeted by Bharat Markam, a Beat Guard in his mid-thirties, whose warm smile cut through the cold.



Padmashi Camp in Kisli Range of Kanha Tiger Reserve

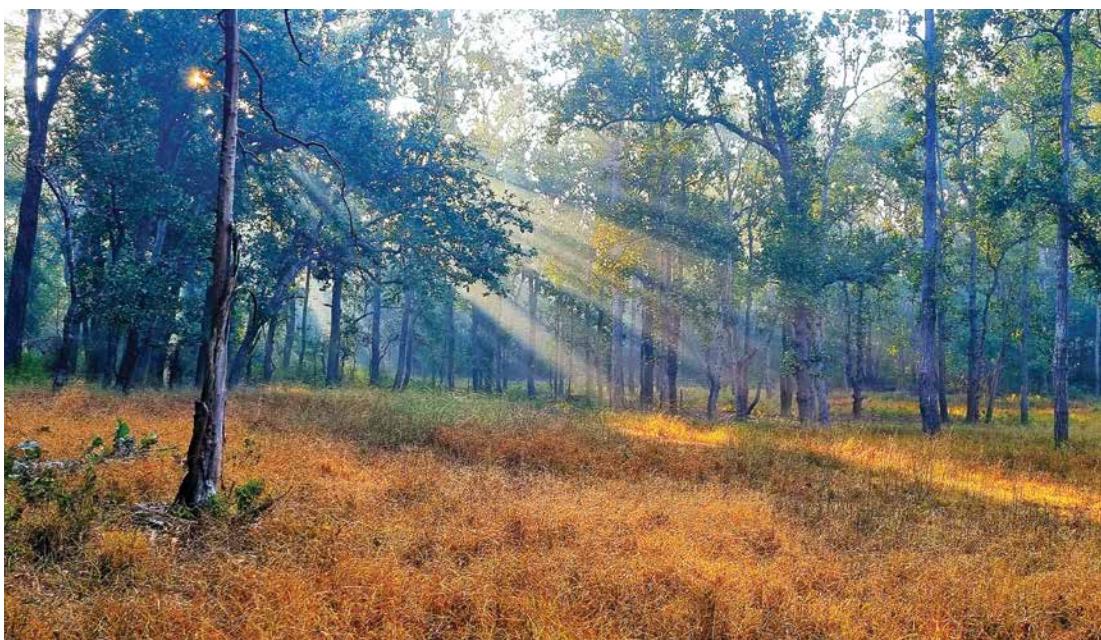


A team of forest guard and forest watcher preparing dinner at the camp

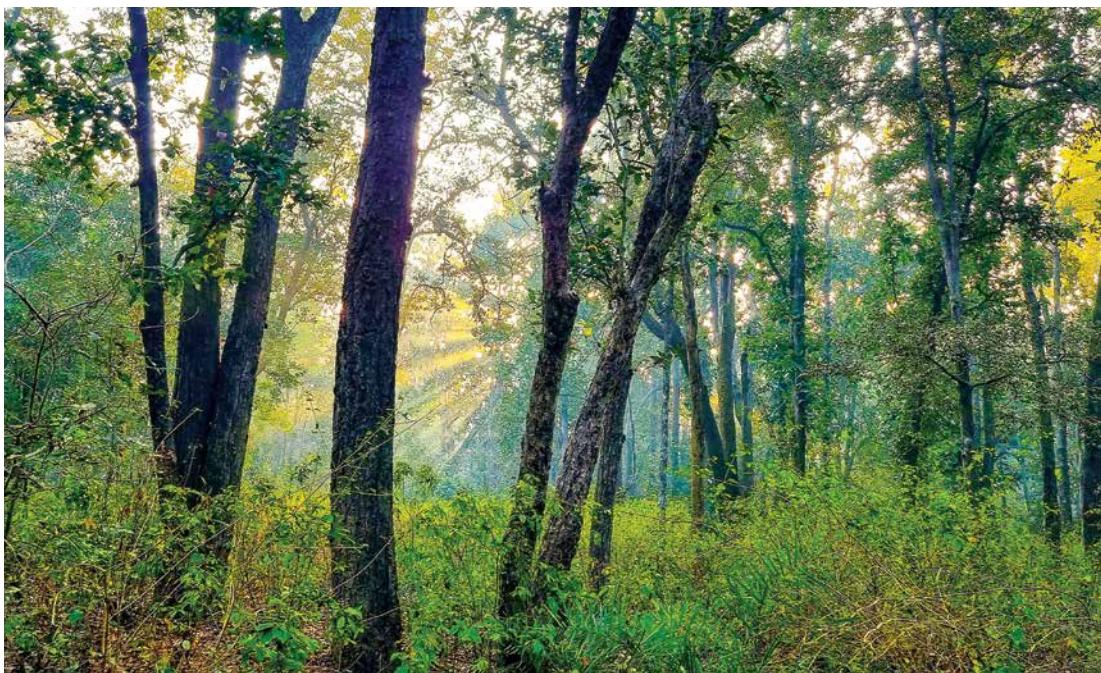
Our conversation began over a steaming cup of black tea infused with a generous amount of ginger. Anyone who has had tea brewed in a forest camp would understand its almost divine flavour. Bharat proudly showed me around the camp, which consisted of a small two-room building and an outdoor kitchen with a traditional chulha, where preparations for dinner were already underway. The camp had no electricity; the only power came from solar panels, just enough to light a few bulbs for a few hours each day.

Bharat kindly offered me his bed, but I politely declined and made myself comfortable on a large iron box used to store his forest department-issued belongings. After a simple yet wholesome meal of boiled rice, dal, and sabzi, Bharat declared it was time to turn in for the night. It was only 8:00 p.m.! Back in Mumbai, I rarely left the office before then. But here, in the wilderness, the rhythm of life was different. Nightfall meant rest for all creatures. Snuggled in my sleeping bag, I drifted off to the sounds of owls, nightjars, crickets, and the occasional chital alarm call.

The next morning, I awoke around 4:30 a.m. to find Bharat already up. Another cup of hot black tea – our only defence against the biting



Sunrays piercing the dense sal forest of Kanha on a chilly winter morning



The AITE provides an opportunity to interested and eligible nature lovers to explore forests and contribute to the world's largest tiger enumeration exercise!

cold – prepared us for the day ahead. We set off on our assigned transect, a route where a forest guard, watcher, and volunteer record mammal signs. Bharat reminded me to be cautious: “Respect the tiger, and the tiger will respect you”, he said.

As we walked, we observed pug marks and hoofprints left in the soft soil. Large trees bore scratch marks where tigers, leopards, and bears had sharpened their claws. It was fascinating to “read” nature, interpreting these signs as we navigated Kanha’s Sal and mixed forests. We wove our way through spider webs and dense, dew-soaked vegetation, fully immersed in the sights, sounds, and scents of the jungle.

One morning, however, stood out above the rest. As we stepped onto the riverbed of the Banjar, we encountered fresh tiger pug marks – likely from a mating pair. The water seeping from the damp soil indicated the tigers were close, perhaps just fifty meters ahead. We moved silently, taking every step with extreme care, scouting the area with binoculars to avoid disturbing them. The forest creatures – spotted deer and langurs – soon spotted the tigers and set off a chorus of alarm calls. We stood still, waiting

for the jungle to reveal the tigers’ whereabouts.

After a while, the forest grew quiet again. We assumed the tigers had slipped into the dense thickets, out of the sight of watchful langurs and deer. We continued forward cautiously, following the pug marks until we realized the tigers had crossed to the opposite bank. We scanned the shrubs for any movement, our senses heightened, ready to catch the slightest sound or rustle. But the tigers remained elusive, perhaps as keen to avoid us as we were to see them.

As Jim Corbett famously wrote, “The tiger is a large-hearted gentleman”, and that day, we experienced it firsthand. After forty minutes, the jungle’s “silent sound” told us the tigers had moved on. 



Kedar Gore is an experienced wildlife conservationist, a member of BNHS Governing Council and Director of The Corbett Foundation.

The return of the Indian Skimmer

Text: Khushboo Rani

The Vikramshila Gangetic Dolphin Sanctuary (VGDS), established in 2009, named after the ancient University, serves as a refuge for the endangered Gangetic dolphin and also marks the remarkable return of the Indian skimmer on the Ganga in the heart of Bihar. The sanctuary spans the river, preserving a habitat vital to the Ganga River ecosystem.

In the early 2000s, the Ganga river stretched at this location were known by these remarkable birds. The Indian skimmer, known for its unique beak designed for skimming the water's surface, was a regular sight. However, as the years passed the skimmers were difficult to spot, leaving behind an air of concern and questions about the ecosystem.

By 2011, the Indian skimmer had all but disappeared in this area. The decline was attributed to various threats – habitat

degradation, human disturbances, and changes in river dynamics. Conservationists, therefore began a decade-long mission to restore the skimmer's habitat. Protected zones were established, patrolling was intensified, and all stake holders united in a shared mission.

In June 2023, their efforts paid off. After nearly two decades, the Indian skimmer returned to the now well established Sanctuary area, with sandbars once again hosting nests and eggs – a sign of new life. Two nests with six eggs, a successful hatching, and the cautious flutter of tiny skimmer wings – a sight not seen for years. The skimmers had chosen VGDS as their nesting ground, showcasing nature's ability to reclaim its spaces when given a chance.

The success continued in October 2023, when the skimmer was also spotted at Nagi Dam Bird Sanctuary in Jamui, Bihar, demonstrating



Ganga landscape



ASIF N. KHAN

Indian Skimmers in flight

a promising expansion of their range and the interconnectedness of wetland habitats in Bihar.

The return of the Indian skimmer is a powerful example of successful conservation. The sanctuary, forest department, and local communities have together helped this bird species reclaim its habitat. This story is not just about the skimmer's return, but also a reminder of the importance of continued efforts to protect and preserve delicate ecosystems.

The story of the Indian skimmer's return to Bihar's waterways after a two-decade absence is a beacon of hope. As these birds once again grace the skies of Bihar, the message is clear: with dedication and collaboration, we can ensure the future of such avian treasures. The Indian skimmer's return is a symbol of hope and a brighter future for Bihar's wildlife.

Editor's Note: *The Indian skimmer was once widespread across all major river systems in central and northern India, with its range limited to north of approximately 16° N. In Bihar, historical records document its presence in several locations, particularly along the Ganges, where it was considered abundant. While a notable undated account, likely*

from the 1930s mentions its abundance, more recent observations include 140 individuals near Bhagalpur in January 1995. Smaller groups were also spotted near Sultanganj in February and May 1999. The recent nesting records from the Ganga river stretch within the Vikramshila Gangetic Dolphin Sanctuary (VGDS) are particularly significant. This observation likely represents a second clutch, a behaviour commonly seen when the first clutch fails. These findings raise the possibility of additional nesting sites along the tributaries of the Ganga in Bihar, such as the Gandak, Kosi and Son Rivers. These tributaries provide critical nesting habitats that may support skimmer breeding activities, warranting further exploration to better understand and conserve the species in the region. 



Khushboo Rani is a Senior Researcher at BNHS and a passionate conservationist with experience in bird migration studies.

IN MEMORIAM

Umaji joined the BNHS in 1967 after his contract with the Prince of Wales Museum (now Chhatrapati Shivaji Maharaj Vastu Sangrahalaya) ended. He got appointed after J.C. Daniel then (Curator/Director) found him 'loitering' (as Umaji put it) near the entrance of Hornbill House. He worked with BNHS for 37 years until his retirement in 2004. However, he was recalled after a gap of five years in 2009 and retired again in 2014, at the age of 70. During his farewell party, I joked that with two retirements and two farewells, he should never think of coming back to Hornbill House again!

After our initial meeting, I met Umaji off and on after joining the Great Indian Bustard project in March 1981. The project involved frequent trips and stays at Hornbill House for stopovers during surveys. Over time, we developed a liking for each other, and by then, my Hindi had improved enough for us to converse. Our bond deepened during two periods when I was assigned desk jobs at Hornbill House. During the second stint, in particular, a special camaraderie blossomed. He found a confidant in me, sharing his many life stories, secrets, and worries, while Uma to me, was fun-filled and endearing company during my sojourns in Hornbill House.

Umaji was an endearing personality — jovial, ever-smiling, and full of mischief and banter, which added to his charm. He was a natural entertainer and could easily have thrived in the film industry instead of BNHS! He had nicknames for many of us; mine was Chhota Lankapati (small Ravana), with Bada Lankapati (big Ravana) reserved for J.C. Daniel. Another



Uma Pratap Singh
January 30, 1943 – October 24, 2024

of Umaji's talents was cooking. His famous dal attracted requests from junior staff to the Director. All BNHS Directors were fond of him and would avoid reproaching him directly, even when the situation warranted it. His popularity extended to staff, regular BNHS members, researchers, and visiting scientists. As Aasheesh Pittie, a birder and BNHS life member, wrote on Facebook after Umaji's passing "Umaji was the second coming of 'William,' BNHS's original mascot. Recognized and loved by all visitors to Hornbill House."

Umaji brightened BNHS with his affectionate smile, joyous spirit, and antics. Umaji faced his share of struggles. In his later years at BNHS, he grew frustrated, especially after learning that his contract would not be renewed when he turned 70. Age, ill health (he was diabetic), and the physical toll of climbing stairs daily had caught up with him. He longed to spend his final years with his family in his village in Satna district, Madhya Pradesh. In January 2014, I went to see him off at Chhatrapati Shivaji Maharaj Terminus for the last time.

Fortunately, his story had a happy ending. We kept in touch occasionally after his retirement, and he was always in good spirits. I spoke to him just ten days before his demise, and he proudly told me that his granddaughter had started working in a bank in Satna and that his grandson was completing an engineering degree. He was pleased that his son was now finally managing their farmland well, and by then, they had a *pucca* house to call their own. Umaji's was truly a life well-lived and I am certain he passed away in peace.

Ram, Ram, Umaji

— Ranjit Manakadan
Former Deputy Director, BNHS

"I cannot think of my BNHS days without the staff and colleagues who worked with me for decades. There was *chowkidar* Uma Pratap Singh, whose tenure preceded mine! He had the boundless energy of a young man; after a long day at work guarding the gates of the Hornbill House, he would spend time singing loudly, playing with his dog Rani or hanging out with friends outside the gate. Uma was such a fixture at the Hornbill House that when he went home on annual leave to his village in MP, the House would look empty, Rani would look sad and lost and the staff would also start missing him! I would look after Rani until Uma returned. Once Uma was back, Rani would ignore me completely, as if telling me, 'My owner is back, I do not need you now!' Uma due to failing health ... We gave him a farewell, on a scale not given to any staff at BNHS, and sent him off loaded him with gifts from the staff."

— Dr Asad R. Rahmani
Former Director, BNHS
(Excerpt from LIVING WITH BIRDS)

Ladakh Tourism Hit by Free Ranging Dog Crisis

A Himalayan Brown Bear being harassed by a pack of free-ranging dogs in Drass

Text: **Kishor Rithe**

The black-necked crane *Grus nigricollis* is a bird of extraordinary beauty, revered in Ladakh's culture as "Trung-Trung Karmo". These majestic creatures hold a sacred status, their presence deeply woven into local traditions, monastery paintings, and cultural dances like the Chartses. As a flagship species of high-altitude wetlands and marshes, it comes as no surprise that the Ladakh government has declared it the state bird. With a global population of approximately 11,000, and only around 137 individuals in Nepal (WWF 2014), their conservation is of paramount importance.

Ladakh's high-altitude landscapes are home to an astonishing array of wildlife, with its wetlands and marshes providing crucial ecosystem services. The region supports 11 endangered mammal species endemic in Ladakh, including the elusive snow leopard, Himalayan brown bear, Eurasian lynx, red fox, Asiatic ibex, Ladakh urial, long-tailed marmot, mountain weasel, stone marten and Eurasian otter. In

addition to these, the area also supports other wildlife such as the argali, Himalayan ibex, blue sheep, Tibetan antelope, Tibetan gazelle, musk deer, woolly hare, plateau pika, and a diverse array of voles and bat species.

In an effort to protect the black-necked crane, the Bombay Natural History Society (BNHS) has launched a dedicated conservation project in Ladakh. Accompanied by BNHS President Pravinsingh Pardeshi, Head, The Habitats Trust (THT) Rushikesh Chavan, Anup Prakash Biodiversity Conservation Scientist and Manager, THT, and myself, we embarked on a mission to monitor our team's efforts on the ground.

On November 17, 2024, we arrived at Kushok Bakula Rimpoche Airport in Leh, where temperatures had plummeted to -8°C at 1:00 p.m. A warm welcome drink at Casa Galwan Hotel provided some respite from the biting cold. Given Leh's high altitude (3,520 m or 11,550 feet), acclimatization was essential before ascending further. The lack of oxygen – 40% lower than at sea level – can cause altitude





BNHS PHOTO LIBRARY

BNHS and The Habitats Trust leadership team at Hanle, Ladakh, overseeing the free-ranging dog sterilization programme

sickness, making rest, hydration, and prescribed medications like Diamox crucial.

While acclimatizing, I overheard a startling conversation about Ladakh's growing free ranging dog (FRD) crisis. The Sonam Norboo Memorial (SNM) Hospital in Leh records an average of five dog bite cases daily, with annual cases rising from 556 in 2015–16 to 1,839 in 2021–22. A particularly gruesome incident in March 2023, where a septuagenarian woman was killed by stray dogs in Zanskar, prompted the Ladakh administration to issue a public advisory. In response, the Jammu and Kashmir and Ladakh High Court took suo motu cognizance of the issue, initiating a public interest litigation (PIL) in May 2023. The court directed the Wildlife, Animal Husbandry, and Municipal authorities to collaborate and implement coordinated measures to control the FRD population.

As BNHS has partnered with the Indian Army on wildlife conservation for over 70 years, we convened a meeting with GOC Lieutenant General Hitesh Bhalla, Principal Secretary of the Animal Husbandry Department, and PCCF & CWLW of Ladakh, Mr Brij M. Sharma. Mr Sharma estimated the FRD population in Ladakh at 50,000 and urged swift action on the Animal Birth Control (ABC) programme. Despite the programme's inception in 2013,

a lack of funding and resources has hindered its reach, particularly in rural areas adjacent to wildlife habitats.

I equipped myself with warm clothing, before we set out for the Changthang Wildlife Sanctuary, a vast expanse of 1,600 sq. km, and home to the world's highest-altitude lakes – Tso Moriri, Pangong Tso, and Tso Kar. En route, we stopped at the Chumathang Hot Springs, where mineral-rich sulphur waters are believed to have medicinal properties. After reaching Nyoma at 4,180 m (13,710 feet), we spotted a stonechat and chukar partridge crossing the road.

As we continued, we came across an important environmental initiative – BNHS had recently installed an Organic Waste Composter (OWC) machine at the Nyoma Army Unit to aid in garbage decomposition, a critical challenge in cold climates.

Near Hanle, we searched for the elusive Pallas's cat, a rare and mysterious feline species. Though the habitat was suitable for a sighting of the cat we were unsuccessful. However, we did encounter a common merganser and a Pallas's gull. Tragically, we learned that a road accident had claimed the life of one of these elusive cats. Hanle, situated at 4,500 metres above sea level, is also home to the Indian Astronomical Observatory, one of the world's highest optical telescopes.

The road to Hanle was breath-taking, with snow-covered landscapes stretching endlessly. Upon arrival at the Army camp, we set out for Kalak Tar, where we were fortunate to spot a Tibetan gazelle. Later, our BNHS team handling the ABC programme also arrived safely, ready to set up the surgical camp.

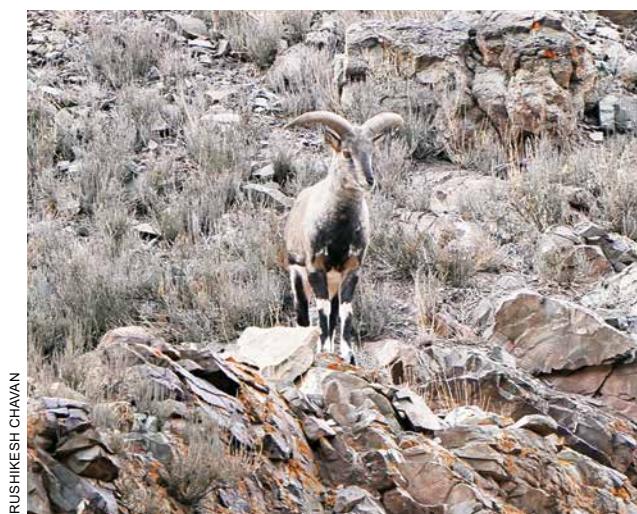
The next morning, while awaiting the camp's start, we made another attempt to locate the Pallas's cat – this time crossing a frozen stream and observing fish movements beneath the ice. Again, luck was not on our side. Returning to the Hanle army unit, we inspected the ABC surgical camp, where veterinary doctors and dog handlers worked diligently, following protocols with precision. The BNHS team, in collaboration with the Animal Husbandry Department, has been conducting ABC/sterilization programmes across Ladakh, targeting key wildlife areas like Changthang Wildlife Sanctuary, Hemis National Park, and Karakoram Wildlife Sanctuary. Army officials noted that due to BNHS's sustained efforts over the past three years, the presence of puppies around army camps had significantly declined. This was a promising sign that the ABC programme was making an impact.

Changthang Wildlife Sanctuary remains one of the few places in India where the Tibetan wild ass (kiang) and black-necked crane coexist. The sanctuary also shelters the snow leopard,

Tibetan wolf, wild yak, bharal, brown bear, and marmot. With over 44 species of water birds and a rich diversity of migratory birds, the region is a paradise for conservationists and wildlife enthusiasts alike.

After lunch, we visited Bhok at Hanle, where we spotted kiang and a Eurasian eagle-owl. This wetland is a well-known habitat for the black-necked crane, the state bird of Ladakh. However, they had already migrated by September. These cranes are summer visitors to the Qinghai-Tibet Plateau in China and northern India, wintering in parts of southern China and Bhutan. While their Indian distribution includes Ladakh, Sikkim, and Arunachal Pradesh, they breed exclusively in Ladakh. To reach Ladakh, they undertake an arduous journey, crossing high mountain peaks from Qinghai-Tibet, covering approximately 700 km. The marshes of Changthang in Ladakh serve as their primary foraging and breeding grounds.

It was now time to proceed towards Chushul. The glaciers were positioned west of the mountain range, not towards the east. At the ITBP check post, we met a birder in uniform who frequently uploads bird records on eBird. He showed us a solitary snipe, the only snipe species likely to be seen in streams during the colder months. We continued our journey, passing through Chushul and finally reaching Tangtse army camp at 8 p.m. for an overnight stay.



A male Bharal stands guard, observing the author from a vantage point. The Bharal, or Blue Sheep, is neither blue nor a sheep



The Tibetan Gazelle is endemic to the Tibetan Plateau. The Ladakh population is estimated to be approximately 50 individuals

CONSERVATION NOTES



RUSHIKESH CHAVAN

The mating system of the Common Merganser is monogamous; they form pairs for at least one mating season



RUSHIKESH CHAVAN

The solitary snipe breeds in mountain bogs and river valleys above the timberline and can also be seen in marshes and swamps at lower altitudes

Tangtse, or Drangtse village, lies in the Durbuk tehsil of Leh district. Traditionally, it marked the border between the Nubra region to the north and the Pangong region to the south. It was once a crucial halting point along the trade route between Turkestan and Tibet. During our journey, we were fortunate to spot a little owl, a kestrel, a woolly hare, and a red fox – the latter being a first-time sighting for me.

Our next objective was to assess the free-Ranging Dog (FRD) population at the springs and Tsoak Salu army establishment. Departing from Tangtse early in the morning, we crossed the famous Pangong Lake. Spanning nearly 150 km, Pangong Lake extends between India and China, offering one of the most mesmerizing landscapes in Ladakh. While camping near the

lake is a sought-after experience, we had no such luxury during our mission.

We then traversed the formidable Khardung La Pass, one of the highest motorable roads in the world at an altitude of 5,602 m (18,380 feet). The views were breath-taking. After crossing both Pangong Lake and Khardung La, we reached the hot springs near the China border.

En route, we spotted a herd of 12 Tibetan argali *Ovis ammon hodgsoni*, locally known as Nyan. These are the rarest wild sheep, inhabiting a vast range of approximately 2.5 million km² across the Tibetan Plateau and its margins. Tibetan argali is one of two subspecies categorised as endangered by the IUCN. The Nature Conservation Foundation (NCF) has updated the estimated population in India to around 600–800 individuals, with 400–600 residing in eastern Ladakh. Earlier estimates placed the population at just 200 animals. The Tso Kar Basin now supports what is likely the largest argali population in Ladakh, with around 120 individuals.

Upon reaching Tsoak Tsalu Army establishment, we learned that the FRD population had risen to 400, posing significant challenges for the army. He urged BNHS to conduct an Animal Birth Control (ABC) camp as soon as possible.

We also assessed the FRD population of around 40 at the hot springs, situated at an elevation of 5,727 m. Army officers stationed there informed us that only two herds of Chiru



ANUP PRAKASH

Robin Accentors are commonly seen around pastures and mountain valleys

migrate to the hot springs in summer before moving to China in winter. We were lucky to spot three wild yaks near the hot springs. The total population of wild yaks in India is estimated at just 110 individuals, primarily in Ladakh. Currently classified as Vulnerable (VU) on the IUCN Red List, their numbers continue to decline.

On our return journey to Leh, we spotted another red fox near the army establishment at Tsok Tsalu, likely accustomed to scavenging from tourist vehicles. After two gruelling days of high-altitude travel, we enjoyed a well-earned night of rest at Hanle.

Our next goal was to assess the FRD situation in Hemis National Park, a popular destination for tourists hoping to catch a glimpse of the elusive snow leopard. Ulley, located within the park, is renowned for its snow leopard population. Along the way, we spotted a blue sheep near Ulley. Ladakh is home to approximately 11,000 blue sheep *Pseudois nayaur* and 6,000 Asiatic ibex *Capra ibex sibirica*. The snow leopard found in Hemis National Park, Changthang Cold Desert Wildlife Sanctuary, and other areas of Leh and Kargil districts is one of the five big cats whose distribution in India was relatively unknown due to a lack of extensive surveys. However, the Wildlife Institute of India (WII) recently published a status report on snow leopards, estimating 718 individuals in India based on surveys covering 70% of their range. Ladakh, with an estimated 477 snow leopards, has the highest population in India, with Hemis National Park being a key habitat.

Snow leopards are distributed across 12 countries in Asia, with India having about 100,000 km² of their habitat – approximately 5% of the global snow leopard range. As the flagship species for conservation in the Indian Himalaya, the snow leopard is also the state animal of Ladakh. The WII and NCF have extensive experience in snow leopard population surveys across India. Recent efforts include state-level surveys in Himachal Pradesh, Uttarakhand, and Sikkim. Interestingly, Hemis National Park was not previously known for the presence of

Sr. No.	Area/ army unit	Species of Interest	FR Dog Count
1	Loma	Black-necked crane	73
2	Hanle	Tibetan Gazelle / Pallas's cat	53
3	Chushul	Ladakh urial / Black-necked crane	78
4	Tangtse	Snow leopard	159
5	Durbuk	Snow leopard	133
6	Partapur	Snow leopard / Asiatic ibex	211
7	Siachen Base Camp	Asiatic ibex	186
8	Korzok	Black-necked crane	135
9	Nyoma	Black-necked crane	227
10	Hanle	Tibetan gazelle / Pallas's cat	89
11	Drass	Himalayan brown bear	235
12	Tsog Tsalu	Tibetan antelope / Argali	200
13	Hot Spring (Changchenmo)	Tibetan antelope	40
14	Dungti	Black-necked crane	60
Total			1,879

common leopard *Panthera pardus*, but a recent issue of the *Journal of the Bombay Natural History Society (JBNHS)* reported the first-ever record of a common leopard in the park.

Ulley is situated in Ladakh's Sham region, north of the Indus River, at an altitude of about 3,962 m (13,000 feet). The valley, home to just seven houses, is a prime habitat for ibex. Over the past decade, Ulley has become a hotspot for snow leopard tracking, offering sightings of not only snow leopards but also urials, wolves, Himalayan foxes, bearded vultures, Himalayan griffons, and golden eagles.

Upon reaching Ulley, we found several FRDs but no snow leopards. We engaged with homestay



RUSHIKESH CHAVAN

The Tibetan Sand Fox, first reported in India only in 2005, can be seen hunting for pikas

owners and renowned snow leopard trackers, many of whom praised Rinchen Wangchuk, the first Director of the Snow Leopard Conservancy India, for leveraging tourism as a conservation tool by ensuring that revenue directly benefited local communities.

We then headed to Shel and Khara in search of the snow leopard. “Shel” means “mirror” in Ladakhi, referencing the nearby Shey Palace, which reflects beautifully onto a holy pond. Unfortunately, we did not see the snow leopard here either. While waiting, we struck up a conversation with a local Ladakhi man erecting a fencing pole. His wife, originally from Kargil, invited us in for tea, which was much needed in the freezing weather. Sitting in their traditional kitchen, we learned about their lives and their encounters with snow leopards. She had also established a homestay, and we promised to stay there on our next visit.

This trip was crucial for planning ABC camps, as we had now identified high-conflict wildlife areas near forward outposts.

The Animal Husbandry Department (AHD) has already sterilized over 8,400 FRDs in 2023–24, with officers like Shri Mohd Ismail and Dr Stanzin Rabgiaz leading committed efforts despite resource and funding constraints. The



RUSHIKESH CHAVAN

The Wild Yak, culturally significant to Tibetans, is believed to have only a few individuals remaining in India

Habitat Trust has financially supported BNHS in procuring additional veterinary expertise to supplement these efforts in wildlife habitats. The Chief Wildlife Warden, Mr B.M. Sharma, and Wildlife Warden, Shri Mandeep Mittal, have also provided invaluable support.

Back in Leh, we coincidentally met government officials working on recommendations for Ladakh’s economic development. I seized the opportunity to emphasize how wildlife tourism is crucial to the region’s economy and how the FRD menace must be tackled urgently. They assured me that this concern would be addressed in their official report, ensuring the sustainable development of Ladakh’s proposed new districts. Let us hope that wildlife survives the FRD threat and that Ladakh’s tourism supports more livelihoods. ■



Kishor Rithe, Director, BNHS, has been working for wildlife conservation through sustainable livelihoods, conservation action, advocacy, and policy for over three decades.

Published on December 31, 2024 by the Honorary Secretary for Bombay Natural History Society, Hornbill House, Dr Sálim Ali Chowk, Shaheed Bhagat Singh Road, Mumbai 400 001, Maharashtra, India.



- Join BNHS Programmes: Explore, Learn, and Connect with Nature like never before
- Over 140 years of expertise in nature and wildlife
- Discover diverse ecosystems
- Be a part of a community dedicated to conservation and environmental education, and contribute to preserving our natural heritage



BOMBAY NATURAL HISTORY SOCIETY

Hornbill House, Dr Sálím Ali Chowk, S.B. Singh Road, Mumbai 400 001,
Maharashtra, India.

for further details & registration: E-mail us at programmes@bnhs.org
Voice call/WhatsApp +91 99697 98447 (Mon–Fri: 9:30 a.m. to 5:30 p.m.)



www.bnhs.org

Build A Balanced Investment Portfolio



Open Demat & Trading A/C

Choose From A Wide Range Of Products To Balance Risk & Returns

Low/No Risk

- Mutual Funds
- Equity SIP
- Corporate Fixed Deposits
- Bonds
- ETFs

High Risk

- Intraday Equity
- Intraday Futures
- Intraday Options

Open A Demat & Trading Account Today!



VISIT:

www.sbisecurities.in

Scan



Registered & Corporate Office: SBICAP Securities Limited Marathon Futurex, Unit No. 1201, B-Wing, 12th Floor, N M Joshi Marg, Mafatlal Mill Compound, Lower Parel East, Mumbai 400013. Corporate Identity Number (CIN): U65999MH2005PLC155485 | www.sbisecurities.in NSE, BSE, MCX-SX & MCX | SEBI Registration No.: Stock Broker: INZ000200032

DP Registration No.: IN-DP-314-2017 | Research Analyst : INH000000602 | IRDA : CA0103 | AMFI ARN No. 0011

Disclaimer: Investment in securities market are subject to market risks, read all the related documents carefully before investing.

#Mutual Fund Distributor | *We are the distributor of HL and CL of SBI.